Montana Department of Natural Resources and Conservation
Water Resources Division
Water Rights Bureau

# ENVIRONMENTAL ASSESSMENT
**For Routine Actions with Limited Environmental Impact**

## Part I. Proposed Action Description

1. Applicant/Contact name and address: Brownfield Ranch Inc. 2220 Hammond Rd, Hammond, MT 59332

2. Type of action: Application for Beneficial Water Use Permit 39E 30124830

3. Water source name: Unnamed Tributary (UT) to Park Creek

4. Location affected by project: Section 17, T6S, R57E, Carter County

5. Narrative summary of the proposed project, purpose, action to be taken, and benefits: The applicant proposes to divert water from an unnamed tributary (UT) of Park Creek, by means of a dike, from January 1 to December 31 up to 10.95 AF, from a point in the NWSENW Section 17, T6S, R57E, Carter County, for stock use from January 1 to December 31. No flow rate was requested because the means of diversion is overflow from an existing dam that will fill and overflow when water is available. The place of use is generally located in NENWNW Section 17, T6S, R57E, Carter County approximately 10 miles northeast of Hammond, MT. The proposed place of use is an off-stream reservoir 0.8 AC is surface area and 10 feet deep with a calculated capacity of 3.2 AF. The DNRC shall issue a water use permit if an applicant proves the criteria in 85-2-311 MCA are met.

6. Agencies consulted during preparation of the Environmental Assessment:
(include agencies with overlapping jurisdiction)
Montana Department of Fish, Wildlife and Parks
Montana Department of Natural Resources and Conservation
Montana Department of Environmental Quality
United State Natural Resource Conservation Service
Montana Natural Heritage Program
Montana Sage Grouse Habitat Conservation Program
United State Fish and Wildlife Service

## Part II. Environmental Review

**1. Environmental Impact Checklist:**

## PHYSICAL ENVIRONMENT

**WATER QUANTITY, QUALITY AND DISTRIBUTION**

***Water quantity*** **–** The source is a small ephemeral stream tributary to Park Creek, an intermittent stream in Carter County. Neither stream is identified by the Montana Department of Fish, Wildlife and Park as chronically or periodically dewatered. Both sources are dewatered on a regular basis due the character of the streams and their surrounding topography. The proposed use will not change the pattern or regularity of dewatering.

*Determination*: No significant impact

***Water quality*** **–** The UT to Park Creek has not been assessed by the Montana Department of Environmental Quality. Impoundment of available water in a reservoir for stock use will not affect water quality. Evaporation from the reservoir may increase salt content in the reservoir but that water doesn't return to the source.

*Determination:* No significant impact

***Groundwater*** **–** Infiltration from the reservoir may increase groundwater quantity in a local region. No negative impacts to groundwater quantity or quality are likely.

*Determination*: No significant impact

**DIVERSION WORKS** – The diversion works are dams that operate as dikes in the stream. When one reservoir is full, water overflows down a natural swale to the second reservoir. There are barriers, channel impacts and flow modifications due to the dams. Both dams are in place at present and no additional impacts will occur. Water flows in the stream only as a result of snowmelt or substantial precipitation events so the impact of flow modifications and channel impacts is limited. The stream does not provide habitat for fish and has no riparian environment associated with its banks.

*Determination*: Possible minor impact

**UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES**

***Endangered and threatened species*** **–** According to the Montana Natural Heritage Program, there are six animal species of concern and no plant species of concern in the project area. The animal species of concern are the Golden Eagle, Great Blue Heron, Greater Sage Grouse, Bobolink, Loggerhead Shrike, and the Sauger. The UT is unable to support fish population because it doesn't run year around. Bird species would, in general, benefit from a source of year around open water. In a letter to Ralph Brownfield, dated August 7, 2018, Carolyn Sime, Manager of the Montana Sage Grouse Habitat Conservation Program, determined that the project was consistent with the Montana Sage Grouse Habitat Conservation Strategy with the stipulation that weed management is required.

*Determination*: Possible positive impact

***Wetlands*** **–** There are no wetlands in the area mapped by the United States Fish and Wildlife Service and no wetlands are proposed.

*Determination*: Not applicable

***Ponds*** **–** No ponds are present in the project area and the new pond created by the reservoir would have a positive impact on waterfowl and existing wildlife.

*Determination*: Possible positive impact

**GEOLOGY/SOIL QUALITY, STABILITY AND MOISTURE –** According to soil mapping by the United States Natural Resources Conservation Service, the dominant soil in the area is Orinoco-Yawdim silty clay loam with 4 to 15 percent slopes. This is a moderately to strongly saline soil. The impoundment of water in a reservoir for stock use has no potential to degrade soil quality or cause saline seep. Local increase in soil moisture due to infiltration from the reservoir is possible.

*Determination*: No significant impact

**VEGETATION COVER, QUANTITY AND QUALITY/NOXIOUS WEEDS –** The current vegetative cover is natural sparse grasses. No change to vegetative cover is proposed. It will be the responsibility of the land owner to prevent and control the spread or introduction of noxious weeds

*Determination*: No significant impact

**AIR QUALITY –** Impoundment of water in a reservoir for stock use has no potential to adversely affect air quality.

*Determination*: No significant impact

**HISTORICAL AND ARCHEOLOGICAL SITES –** The project area is not located on State or Federal Lands.

*Determination*: Not applicable

**DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AND ENERGY –** No additional demands on environmental resources of land, water or energy not addressed above are recognized.

*Determination*: No significant impact

## HUMAN ENVIRONMENT

**LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS –** There are no known locally adopted environmental goals or plans.

*Determination*: No impact

**ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES** – There are no recreational or wilderness activities in the project area and no access through the project area.

*Determination*: No impact

**HUMAN HEALTH** - Impoundment of water in a reservoir for stock use has no potential to adversely affect human health.

*Determination*: No significant impact

**PRIVATE PROPERTY** - *Assess whether there are any government regulatory impacts on private property rights.*
*Yes___ No_**X**__ If yes, analyze any alternatives considered that could reduce, minimize, or eliminate the regulation of private property rights*.

*Determination*: Not applicable

**OTHER HUMAN ENVIRONMENTAL ISSUES** - *For routine actions of limited environmental impact, the following may be addressed in a checklist fashion.*

*Impacts on:*

(a) *Cultural uniqueness and diversity?* No significant impact

(b) *Local and state tax base and tax revenues?* No significant impact

(c) *Existing land uses?* No significant impact

(d) *Quantity and distribution of employment?* No significant impact

(e) *Distribution and density of population and housing?* No significant impact

(f) *Demands for government services?* No significant impact

(g) *Industrial and commercial activity?* No significant impact

(h) *Utilities?* No significant impact

(i) *Transportation?* No significant impact

(j) *Safety?* No significant impact

(k) *Other appropriate social and economic circumstances?* No significant impact

**2. *Secondary and cumulative impacts on the physical environment and human population:***

Secondary Impacts: No secondary impacts are recognized.

Cumulative Impacts: No cumulative impacts are recognized

**3.** ***Describe any mitigation/stipulation measures:*** None

**4.** ***Description and analysis of reasonable alternatives to the proposed action, including the no action alternative, if an alternative is reasonably available and prudent to consider:*** The only reasonable alternative to the proposed project is a no-action alternative. The no-action alternative does not prevent any significant environmental problems and prevents the Applicant from improving the availability of stock water on his property.

## *PART III. Conclusion*

***1.*** ***Preferred Alternative:*** Issue a water use permit if an Applicant proves the criteria in 85-2-311 MCA are met.

***2*** ***Comments and Responses:*** None

**3.** ***Finding:***
*Yes___ No_**X**__ Based on the significance criteria evaluated in this EA, is an EIS required?*

*If an EIS is not required, explain why the EA is the appropriate level of analysis for this proposed action:* An environmental assessment is the appropriate level of analysis because the proposed action is very localized and only to create a stock water reservoir in southeastern Montana. No significant environmental impacts related to the proposed project were recognized.

*Name of person(s) responsible for preparation of EA:*

*Name:* Mark Elison
*Title:* Regional Manager
*Date*: 6/4/2019